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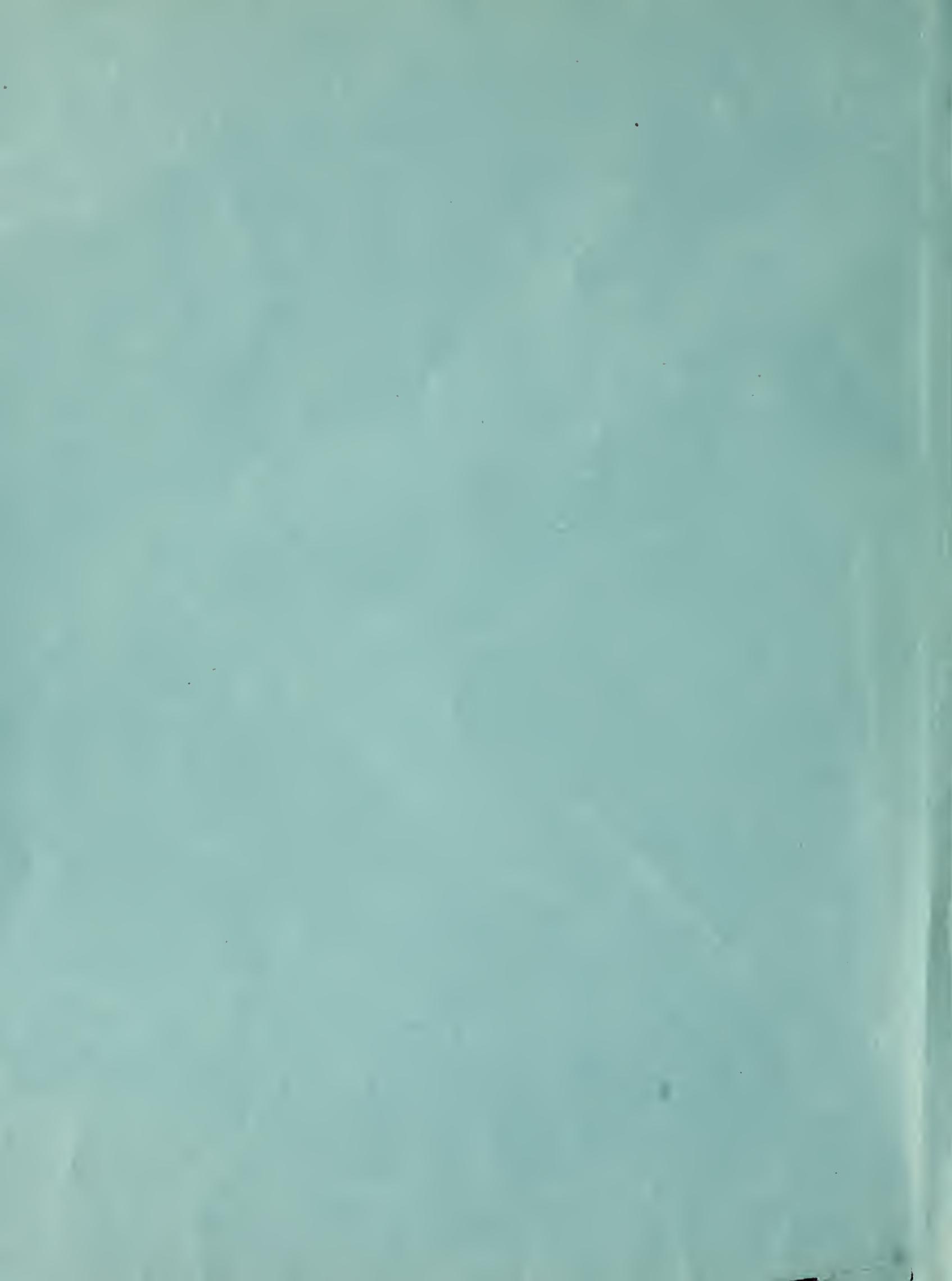
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GEOGRAPHY
OF
MASSACHUSETTS;

A SUPPLEMENT TO THE
ECLECTIC SERIES OF GEOGRAPHIES.

BY
ALBERT P. MARBLE,
Superintendent of Schools, Worcester.

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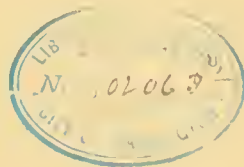


GEOGRAPHY
OF
MASSACHUSETTS;

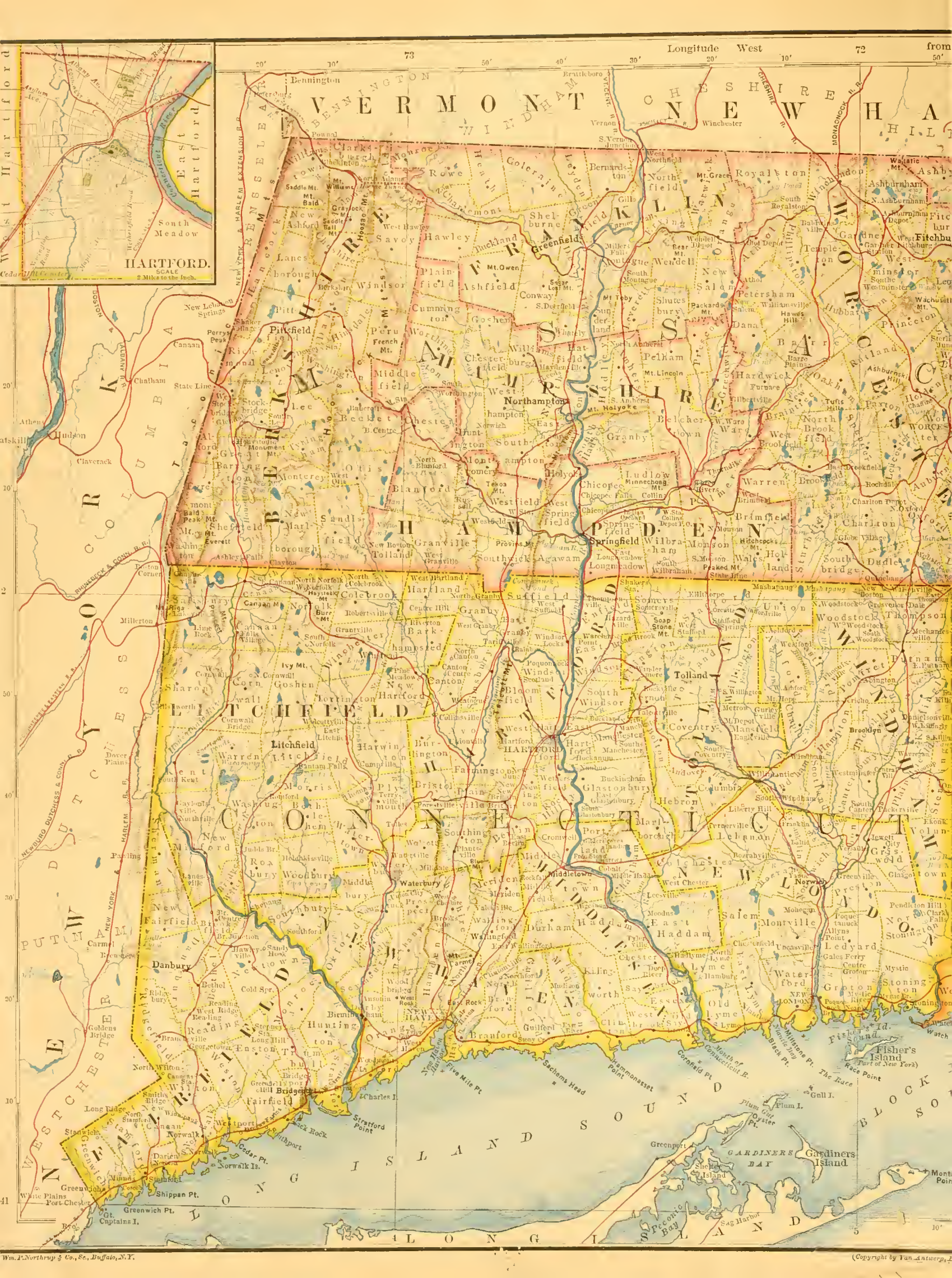
A SUPPLEMENT TO THE
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Cincinnati



HARTFORD.

SCALE
2 Miles to the Inch.

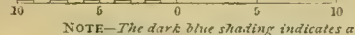


**MAP OF
MASSACHUSETTS,
RHODE ISLAND
AND
CONNECTICUT.**

For the Eclectic Geographies.

Natural Size as 1 to 760,320
or
12 Miles to the Inch.

SCALE
Statute Miles.



NOTE—The dark blue shading indicates a depth of water less than 18 feet—the first line a depth of 10 fathoms; the second line a depth of 20 fathoms.

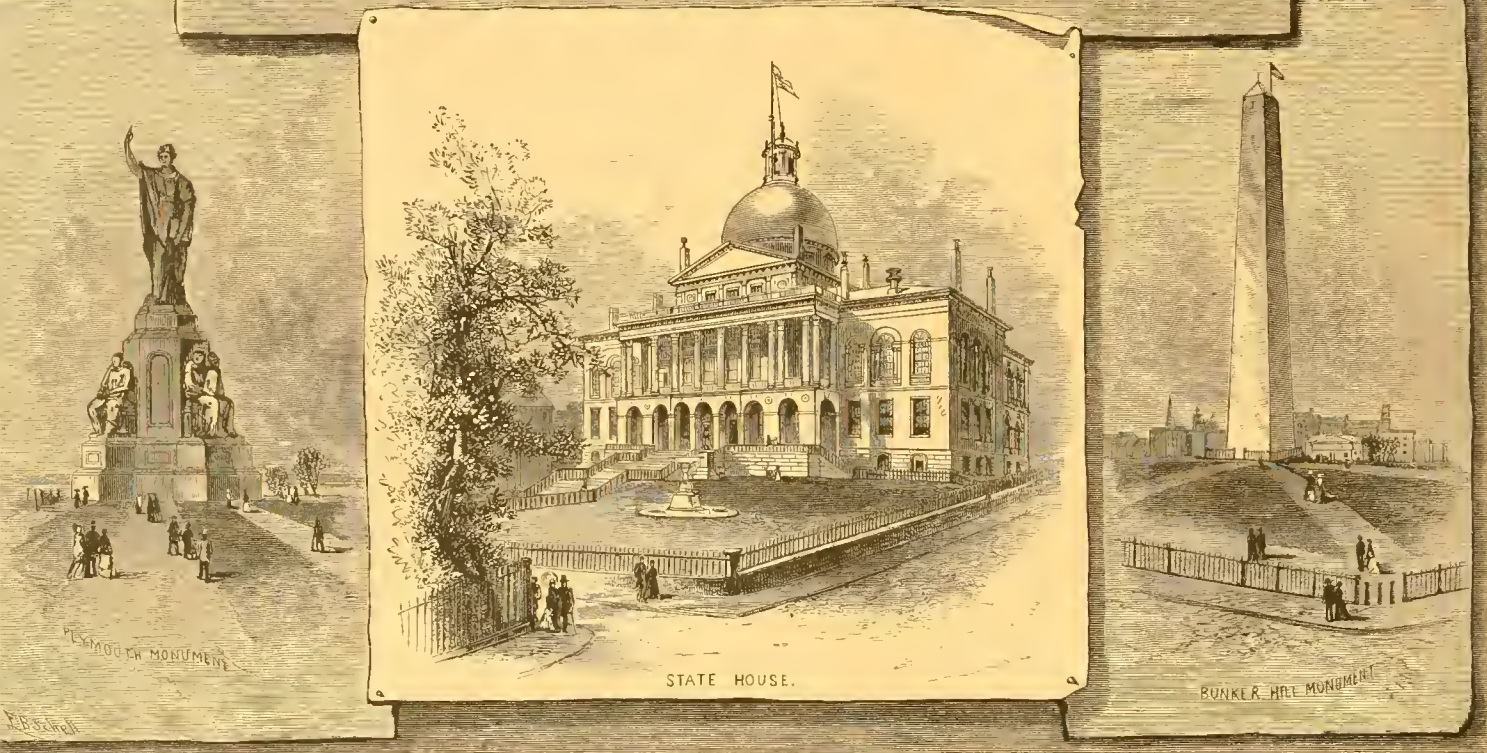
Longitude East from Washington.

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(N 976192)

STATE OF MASSACHUSETTS



DESCRIPTION.

(The Map Questions on page 5 should be studied before the Description.)

I. POSITION, OUTLINE, AND AREA.

Massachusetts, the oldest New England state, extends from $41^{\circ} 42' 53''$ north latitude in the eastern portion, though, for the part, it lies between 42° and $42^{\circ} 45'$; its longitude is from $69^{\circ} 73' 30''$ west from Greenwich.

It is bounded on the east by the Atlantic Ocean; on the south by the Atlantic Ocean, Rhode Island, and Connecticut; on the west by Rhode Island and New York; and on the north by Vermont and New Hampshire.

Extent and Outline. The distance from the north-east corner of the state to the south-east corner of Rhode Island is 95 miles; but the straight line between these two points is about 300 miles. The straight line on the east of Rhode Island has an extent of about 100 miles; and on the north of that state, 21 miles. The boundary with Connecticut is about 87 miles; east of New York, 50 miles; east of Vermont, 40 miles; south of New Hampshire, 60 miles to about three miles north of the Merrimac River; and, keeping about 30 miles from the river, 30 miles north-east to the Atlantic Ocean.

The average width of the western part of the state is $47\frac{1}{2}$ miles. The eastern portion, which extends from north to south nearly 100 miles, has a width, between Rhode Island and the ocean, of about 40 miles. In the north part, the rocky promontory of Cape Ann extends farthest east; in the south, the low peninsula of Cape Cod. The strip of land extends east about 40 miles, and then bends to the south about 30 miles. In form, it is like a bent arm with a clenched fist. It has been called "the great right arm of the state."

The state has an area of 7,800 square miles, or 4,992,000

II. ISLANDS AND BAYS.

6. The island of Nantucket is crescent-shaped; it lies 25 miles south of Cape Cod peninsula, and has an area of 50 square miles. Martha's Vineyard is a larger island, 10 miles west from Nantucket. The Elizabeth Islands, 16 in number, stretch along in a south-westerly direction, 18 miles, between Martha's Vineyard and the main land.

7. Massachusetts Bay is between Cape Ann and the peninsula of Cape Cod; the south part of it is called Cape Cod Bay. In allusion to this broad bay and the towns of historic interest on its coast, Massachusetts is called the "Old Bay State."

Nantucket Sound is between Cape Cod, Nantucket, and Martha's Vineyard; Vineyard Sound is between Martha's Vineyard and the Elizabeth Islands; Buzzards Bay, between the Elizabeth Islands and the main land. The coast of these bays has many good harbors.

III. SURFACE OF THE COUNTRY.

8. The surface of Massachusetts is rugged. The greatest elevations are west of the Connecticut River. They are an extension of the Green Mountain Range of Vermont.

The Berkshire Hills are noted for the beauty of their scenery. Of these hills the Taconic Range is west, and the Hoosac Range east, of the Housatonic River. Greylock, in the north part, is 3,505 feet above the sea; French Mountain, 2,239 feet.

9. Mount Tom, on the west side of the Connecticut River, in Hampshire County, is 1,214 feet high; and Mount Holyoke, on the other side of the river, is 1,120 feet. They belong to the White Mountain Range of New Hampshire.

MAP QUESTIONS.

POSITION AND OUTLINE.—What states bound Massachusetts on the north? What states on the south? What ocean on the east? What bays? What state on the west? What meridian crosses the state near the center? What one passes through Cape Cod? What one, near Boston? What parallel is nearly coincident with much of the southern boundary of Massachusetts? What is the general shape of the state? What peninsulas on the eastern coast? What indentations? What islands belong to Massachusetts? Where are they situated?

SURFACE.—Describe the surface as indicated on the map. In what part are there mountain ranges? Name them. Where is Mt. Greylock? Mt. Wachusett? Mt. Tom? French Mountain? Mt. Holyoke? Bald Peak Mountain? The Blue Hills? What is the prevailing slope of the state? Describe the principal water-sheds.

RIVERS.—What is the largest river in Massachusetts? Describe the course of the Connecticut through the state. Name its tributaries from the west. From the east. What rivers rise in Berkshire County? In what direction does the Hoosic flow? The Housatonic? What important stream in north-eastern Massachusetts? Describe its course. Name its affluents from the state. Where is Ipswich River? Charles River? Mystic River? Describe the course of Taunton River. Of Blackstone River. Quinnebaug River. What streams have their source in Worcester County?

COUNTIES.—How many counties in Massachusetts? Which county is largest? Which one smallest? Which one farthest north? East? West? Most central? Give the physical features of Berkshire County. Of

Worcester County. Of Essex. Of Barnstable. What counties are composed of islands? What counties border Massachusetts Bay? Cape Cod Bay? Buzzards Bay? Through what counties does the Connecticut River flow? The Merrimac? What counties are adjacent to Rhode Island? To Connecticut? Vermont? New Hampshire?

CITIES AND TOWNS.—What is the capital of Massachusetts? How is Boston situated? Name the other principal seaports of the State. What large cities on the Merrimac River? What other important places in Essex County? In Middlesex County? Locate each town named. Mention and locate the county seats and chief towns of each of the following counties: Norfolk. Plymouth. Bristol. Barnstable. Duke Nantucket. What important cities on the line of the "Boston and Albany Railroad"? On the "Hoosac Tunnel Line"? Name other towns in Worcester County. What cities and towns of Massachusetts on the Connecticut River? What are the larger towns of Berkshire County? Name the principal railroad centers of the state.

LOCAL GEOGRAPHY.—Locate and bound the county and the town in which you live. What can you say of the surface? If hilly or mountainous, what are the highest peaks? How high are these? If comparatively level, describe the surface slope. What streams rise in your county? What ones border or flow through it? Name and locate the largest cities. The county seat (or county seats, if more than one). The other leading towns. How many and what railroads intersect your county? Name their terminal points, whether in or out of the state. How far is Boston from the place in which you live?

Wachusett Mountain, in the north part of Worcester County, also belongs to this range, and is 2,018 feet high.

10. East of Worcester County, the hills grow less in height towards the ocean. The Blue Hills, in Norfolk County, are 835 feet high. Almost the whole south-eastern part of the state, with the islands near, is a sandy plain, having occasional elevations of 100 or 200 feet.

V. RIVERS AND WATER-SHED.

11. There are four principal **systems of drainage** in the state, viz: (1) The Housatonic, (2) the Connecticut, (3) the Merrimac, and (4) the waters flowing into Narragansett Bay and Long Island Sound.

In the western part of Berkshire County is the valley of the *Housatonic* to the south, and of the *Hoosic* to the north.

12. The valley of the *Connecticut* extends across the state from north to south, and about 60 miles from the Hoosac Mountains, to the hills near the center of Worcester County. This is the largest river in the state, through which it flows for 50 or 60 miles of its course, with a fall of 130 feet. Its chief branches in the state are the Deerfield and the Westfield, on the west, and Miller's River and the Chicopee, on the east. The Connecticut Valley is noted for its beautiful scenery, its fertile soil, and its water-power.

A low ridge, extending from Princeton, near the center of Worcester County, to the middle of Plymouth County, divides the waters flowing north and east into the Atlantic, from those flowing south and west into Narragansett Bay and Buzzards Bay.

13. The *Merrimac* flows through the north-eastern part of the state, 40 miles, into the Atlantic Ocean. Its water-power is used in the manufacture of cotton goods more than that of any other river in the country, if not in the world. Its chief branches in this state are the Nashua and the Concord.

The other rivers of this section are the Ipswich, the Mystic, and the Charles, which flow into the Atlantic Ocean.

14. The Blackstone drains one-fourth of Worcester County, in the central and south-eastern part, and flows into *Narragansett Bay*. The Quinnebaug drains the south-western part of Worcester County and part of Hampden County, and flows into *Long Island Sound*. The whole water-power of both is used chiefly in cotton and woolen-mills.

The Taunton drains parts of Plymouth and Bristol counties, and flows into Narragansett Bay.

QUESTIONS.—1. Between what parallels and meridians is the principal part of the state situated? 2. Give the boundaries. 3. The extent of sea coast. The length of each state boundary line. 4. The average width of the state. The most easterly promontory and peninsula. Describe Cape Cod. 5. Give the area of the state.

6. Describe the principal islands. 7. The bays and sounds.

8. What is said of the surface? What hills in the western part? State the highest point. 9. Where are Mts. Tom, Holyoke, and Wachusett? 10. Describe the surface of the eastern and south-eastern parts.

11. How many systems of drainage? Name them. Describe the first. 12. The second. 13. The third. 14. The fourth.

V. CLIMATE AND ITS VARIATIONS.

15. The **climate** of Massachusetts is severe and variable. It represents, however, the average of the temperate latitudes in the United States, which is colder than the average in Europe; but the rigour of the climate has tended to make of the survivors a sturdy race.

The nearness of the Gulf Stream softens the extremes of heat and cold on the islands and the south-east coast. In winter, the temperature at Nantucket is 7° warmer than at Cambridge, and 10° warmer than at Williamstown, among the Berkshire hills; and at New Bedford, it is 5° and 7° warmer than at the two places, respectively. In the central and western counties, the mercury may fall 20° below zero in winter; and it often rises to 90° or 95° in summer.

The annual **rain-fall** varies greatly in different parts of the state, and the depth of **snow** is often great.

For a belt 20 miles wide eastward from Worcester, and extending from Connecticut towards the north-east, the yearly rain-fall is 44 inches; south-east of it about 15 miles, and north-west 25 miles, the fall is 42 inches; upon another belt about 25 miles to the west, and in the counties of Bristol and Plymouth, the fall is 40 inches; while in the extreme north-west, and on the east coast and islands, the fall is only 38 or 39 inches.

The average fall of snow each winter is 60 inches in the western part; in the interior valleys, 50 inches; and on the south-eastern coast, 30 inches.

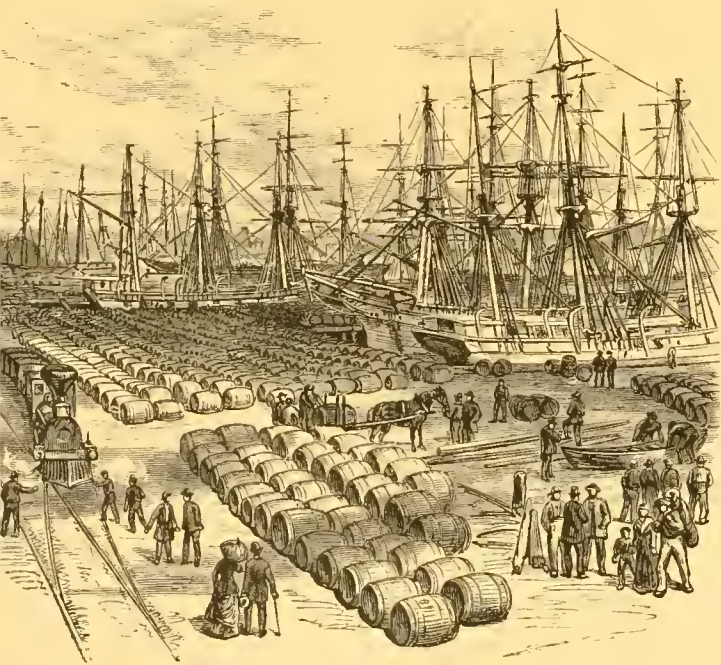
The north-east storms of spring are a disagreeable feature of the climate; but the pure and elastic air of summer, and the rarefied air of the fall, compensate for the cold winds and winters.

VI. SOIL.

Compared with the fertile prairies of the West, the soil of Massachusetts is generally hard and barren. The sandy plains near the coast, and on the islands, are unfruitful, and the rough hills are only fit for grazing and wood-land. In the valleys of the rivers, especially of the Housatonic and the Connecticut, are many fertile intervals; and patches of rich farming land are scattered between the hills, and along the streams all over the state.

VII. MINERALS.

This state does not abound in **minerals**. The most valuable mineral, granite, which is quarried chiefly at Gloucester, Rockport, Fall River, New Bedford, Monson, Milford, Quincy, and Uxbridge.



New Bedford Wharves.

Of the other mineral products, iron is obtained at Cheshire, Stockbridge, and New Braintree; limestone, at West Stockbridge and Lenox; sandstone, at Longmeadow and Wareham; slate, at Claremont and Quincy. Mines of gold, silver, and lead, not worked as yet, are found at Newbury; of copper and marble, at Pelhamfield; of asbestos, at Pelham; and of emery, at Chester.

QUESTIONS.—15. The climate? How is it modified? Extremes of temperature? 16. The rain-fall? How distributed? The depth of snow? 17. Storms? 18. Winds?

General character of the soil? What parts are sterile? What, fertile? The most valuable mineral product? Where found? 20. Other minerals? What are obtained?

VIII. VEGETATION.

21. **Native.** When found by white men, this state was covered with **forests**; and from the top of Mount Wachusett nothing could be seen but one broad expanse of green, with here and there an opening, and the smoke of the Indian's wigwam.

The felling of these forests has changed the climate, both as to temperature and the degree of moisture; and in large measure the nature of the soil is changed by the absence of the trees. The waste of forests has gone so far that the state has taken measures to protect them.

The "Massachusetts Society for promoting Agriculture" offer Tree Prizes for 1888, for plantations of forest trees.

On many of the stony hills, and along the streams, the prettiest, most useful, and best paying crop is forest trees. They are fit for harvest in 25 years.

The uses of forests are manifold. They create, or gradually but constantly improve, the soil; they serve as conductors of electricity between the clouds and the earth, thus giving activity to the vital powers of plants, and leading the clouds to discharge their contents upon the earth; they protect a country from the violence of winds; they keep the snow where it falls, so that it may slowly melt to fill the streams, and not come down in quick floods; they keep the soil from washing from the hills to the valleys and to the sea; they add to the healthfulness of the country, by drinking up the poisonous carbonic acid and the miasmata, and giving out oxygen; they are useful for fuel and timber; and they add beauty to the landscape.

22. The principal native trees are—*Deciduous*: the oak, hickory, birch, maple, ash, walnut, elm, beech, chestnut, hornbeam, lever wood, tupelo, nettle-tree, tulip-tree, plane-tree or sycamore, bass, locust, cherry, holly, poplar, and willow;—*Evergreen*: the pine, cedar, spruce, hemlock, fir, and hackmatack. The great variety of these forest trees, and their rich colored foliage, give an indescribable beauty to the country.

Besides these trees, there is an endless variety of shrubs and small plants, many of which any boy or girl may find on the way to school, and study with pleasure and profit.

23. **Cultivated.** The principal products of the soil are hay, potatoes, corn, tobacco, oats, garden vegetables, apples, pears, cranberries, strawberries, and a variety of other small fruits.

The total value of the agricultural products of the state for 1875 was \$34,443,795.

IX. ANIMALS.

24. **Native.** The wild animals which roamed in the forests, and the birds and fishes which frequented the hills and waters of the state, and were hunted by the Indians, have many of them disappeared. Some are still seen in different parts of the state. The principal **wild animals** are: the black bear, wolf, catamount, wild cat, raccoon, wolverene, fox, mink, weasel, skunk, land otter, seal; the beaver, musk-rat, woodchuck, porcupine, hare, squirrel, rat, mouse; the fallow deer; the grampus, and the whale.

25. The **birds** of Massachusetts include: the eagle, hawk, owl; the cuckoo, woodpecker, king-fisher, lark, oriole, starling, crow, blue-jay, whip-poor-will, night-hawk, martin, robin, thrush, cat-bird, blue-bird, wren, humming-bird, sparrow, snow-bird, yellow-bird (goldfinch), pigeon; the wild turkey and quail; the plover, heron, sandpiper, snipe; the black skimmer, gull, snow-goose, duck, and loon.

26. The **reptiles** are: *snakes*—the black, striped, water, ribbon, garter, house, green, and rattlesnake; *batrachians*—the bull-frog, toad, and salamander.

27. Of marine **fishes** there are: the eel, swordfish, cod, hake, haddock, pollock, mackerel, perch, flounder, turbot, halibut, tautog, bass, sculpin, herring, menhaden, shad, alewife, salmon, smelt, sea-pike, sturgeon, shark, cat-fish, and blue-fish.

In the ponds and streams: the pickerel, trout, pout, shiner, sucker, white, red, and river-perch, river-eel, chub, and minnow.

28. The value of all domestic animals in the state in 1875 was \$17,316,381, of which amount over \$15,000,000 were in cattle and horses.

QUESTIONS.—21. The chief native vegetation? Of what use are forests? What has been done to protect them? Why? 22. Name the principal forest-trees. Deciduous? Evergreen? What other native growths are mentioned? 23. Principal farm products? Their aggregate value?

24. Are there many wild animals in the state? Name and describe the principal ones. 25. Tell what birds are found. 26. What reptiles? 27. Marine fishes? Fresh water fishes? 28. Value of the domestic animals? Of horses and cattle?

X. HISTORY AND PEOPLE.

29. **Indians.** The early people of Massachusetts were various Indian tribes belonging to the Iroquois nation. They have gradually disappeared before the white man. The small remnant of a single tribe are all that now remain within the limits of the state.

Massasoit, sachem of the Wampanoags, who lived between Narragansett Bay and Massachusetts Bay, made a treaty of friendship with the early white settlers, which lasted 50 years. His son, Metaco'met, known as King Philip, thought, quite rightly, that the white man would seize all the lands of the Indians. He joined his tribe with others, and made war; but the Indians were beaten, and King Philip was killed.

These tribes have left their names on the hills, rivers, lakes, and bays, and even the state itself—Wachusett, Bogachoa, Chicopee, Neponset, Quinsigamond, the unpronounceable Chaubunagungamauy Lake, in Webster, the musical Narragansett and Nantucket.

It is a pleasant study to trace in these names the history of men, women, and children, who once lived and hunted and played in the very places where we now dwell; but whose race, and even language, have all passed away. One of the last to linger was the Stockbridge tribe; they lived in the town of that name in Berkshire, and were partly civilized.

The Marshpee Indians still live in the town on Cape Cod, called by their name. They have a church, and schools provided by the state.

30. **Pilgrims.** The first white men to settle here landed at Plymouth in 1620. They disembarked after a perilous voyage of sixty-four days, and founded their settlement in the dead of winter. They were called Pilgrims; for they had left England, dwelt awhile in Holland, and then came hither for the sake of living and of worshipping God as they thought right.

Their vessel was called the Mayflower. Of the 102 passengers, one died on the voyage. Peregrin White was born in November, soon after the vessel arrived. He was the first white child born in New England. By the middle of the next spring all but 59 of the settlers had died.

The Pilgrims were under the spiritual care of Elder William Brewster. Before landing in a country without a government, they signed a kind of constitution, and chose John Carver governor. The people of this colony had a separate government, and elected a governor almost every year till 1692. They then became part of the colony of Massachusetts Bay. The southern boundary line of Norfolk County, the only straight county line within the state, was the northern boundary of the Plymouth colony.

SETTLEMENTS. In November, 1620, the King of England, by a charter granted to "The Council established at Plymouth [England] for the planting, ordering, ruling, and governing of New England in America," all that part of America which lies between the 40th° and 48th° parallels of north latitude. This was the basis of all the patents by which the territory was afterwards divided.

In 1624 there was a settlement at Gloucester, which in 1625 removed to Salem, with Roger Conant as governor.

In March, 1628, Sir Henry Roswell and others took a patent, from the Plymouth Council, of the territory between a line three miles south of the River Charles and three miles north of the Merrimac; thus the Salem colony passed under control of a new company, with John Endicott as governor.

By royal charter, the next March, a colony was created by the name of "The Governor and Company of the Massachusetts Bay in New England."

Seventeen ships filled with settlers came from England in 1630. Among these were John Winthrop, afterwards governor, and many other rich and noted people. About the same time settlements were made in Charlestown, Newtown (Cambridge), Matapan (Dorchester), Roxbury, Shawmut (Boston), Nantasket (Hull), Mystic (Medford), Lynn, and Winnisimmet (Chelsea). The first General Court was held in Boston, October, 1630.

31. **Puritans.** Those who first settled the Bay, came to America to found a state after their own heart. Just escaped from persecution, however, they persecuted. Toleration and civil and religious liberty were scarcely known at that day. They made the church the foundation of the government; and they claimed the right to drive away any one who did not agree with them. In this respect they were quite different from the Pilgrims.

For troubling them by preaching liberty of conscience, which was sedition to them, Roger Williams was banished in 1636, and founded Rhode Island. For the same thing, in 1637, they drove away Anne Hutchinson, a gift woman; she was killed in the woods by the Indians. Some fanatics, who called themselves Quakers, were banished in 1656; and a few of them who turned, were hanged.

In 1692 there was a general belief in witchcraft. At Salem, the jails were filled with victims; and twenty innocent persons were hanged. This delusion soon died out, as it had in other countries.

The bigotry of the Puritans was not peculiar to them; it belonged to the age. Their stern, God-fearing spirit was suited to the times, and just fitted them to battle with wild nature and war-like Indians, and to found a state. Little by little their strict laws have softened; and now there is the greatest freedom where once there was rigid intolerance. The first book of laws of the colony was printed in 1641. It was called the "Body of Liberties." Twelve offenses were capital; in England, at the same time, 150 offenses were punishable with death. The colonists showed a spirit very liberal for their time. Massachusetts Bay, the only colony that assumed the right, coined silver money in 1652.

INDIAN AND FRENCH WARS.—In 1643, the colonies of Massachusetts Bay, Plymouth, Connecticut, and New Haven agreed to aid each other against the Indians. In 1675, King Philip, the ablest Indian chief in New England, united the tribes in a war against the English. They attacked the people of Swans Brookfield, Hadley, Deerfield, Northampton, Lancaster, Medfield, Weymouth, Groton, Springfield, Sudbury, and Marlborough: 600 men, as many dwellings and 13 towns were destroyed in one year. The war closed by the death of Philip in 1676.

In 1690, the New England colonies sent an army against the French in Canada, because of the attacks made by the French and Indians upon the borders of Maine, New Hampshire, and New York. The expedition failed.

In 1704, Deerfield was again attacked by the Indians, set on by the French in Canada; 40 persons were killed, and 100 made prisoners.

In 1710, because of war between France and England, the colonists sent a force and captured Port Royal, a French town, in Nova Scotia. They made an unsuccessful attempt against Quebec, in 1711.

England and France being again at war, in 1745, a force of 4,000 men from Massachusetts, New Hampshire, and Connecticut captured Louisbourg, a strong and costly fortress on the island of Cape Breton.

France and England were again at war from 1754 to 1762. During this time Massachusetts, aided somewhat by the other colonies and the mother country, captured Nova Scotia and Canada. These, with Cape Breton and other islands in the St. Lawrence, were ceded by France to Great Britain.

THE REVOLUTION.—In 1765, the British Parliament passed the "Stamp Act" to raise a revenue on all paper and parchment used in America. The colonists united in opposition to this law, and the arbitrary acts of the royal government and it was repealed the next year. In 1767 a law was passed for the same object, laying a duty on many articles imported into the colonies. The duty was finally removed from every thing but tea. In all this the colonists had no voice. Boston forcibly resisted this tax, and, in 1770, in a conflict with British troops, called the "Boston Massacre," a number of citizens were killed. This hastened the Revolution. The port was closed in 1774. In May, General Gage was sent to Boston by the king, as governor and commander of the troops. He seized the powder and guns which the people had gathered.

A convention of delegates from all the colonies met in Philadelphia, September, 1774, and formed the Continental Congress. They agreed to stop trade with Great Britain till their grievances should be removed. The people were now thoroughly awake; public meetings were held especially in this colony; military companies formed and drilled; powder and guns were collected; the men of Massachusetts were ready to fight the king to get back their liberties.

In April, 1775, General Gage sent troops to take the military stores at Concord. They met the militia in line at Lexington, and fired upon them. Word of this went to Concord before the troops; a battle was fought there, and the British, badly cut up, were glad to get back without the stores.

In June a large body of militia from all the New England colonies met at Cambridge and other places near Boston; fortifications were thrown up among other places, at Breed's Hill, in Charlestown. On the 17th a battle was fought, in which the British, though aided by their ships, were driven back three times. General Joseph Warren fell in the American trenches. Charlestown was burnt. The Americans were driven from the hill, but were not the victors. This battle filled the Colonists with courage. It is called the Battle of Bunker Hill; and a granite monument marks the spot.

y in July, General George Washington, of Virginia, took command of provincial forces, under an elm tree on the Cambridge common which to this day is still standing. Forts were built, and batteries planted, to drive the British from Boston. In March, 1776, they sailed to Halifax, and then to New York. The Massachusetts troops followed, and, in August, fought the Battle of Long Island. The war closed in 1783 with the independence of America. Through it all, Massachusetts stood firm, and sent a large number of men and many worthy to support the American cause.

The state government was founded in 1780, with a written constitution almost the same as now.

In 1788, this state ratified the Constitution of the United States.

In 1820, the district of Maine was made a separate state; it had been a part of Massachusetts since 1692.

OF 1812. This war grew out of Great Britain's claim to take from American vessels seamen who were claimed as British subjects. It bore hard on the commerce of this state, whose vessels were captured; but, though drawn into the war, her sailors maintained the honor of the flag.

CIVIL WAR. From the beginning of this war in 1861 to its close in 1865, Massachusetts took a leading part. One of her regiments shed the first blood in the streets of Baltimore. John A. Andrew, the "War Governor," put her into the van. She furnished more than 160,000 men from a population of 1,231,000.

This state has furnished two presidents of the United States—John Adams and his son John Quincy Adams; three vice-presidents—John Quincy Adams, George Gerry, and Henry Wilson; several noted military officers and foreign ministers; and many statesmen, among them Daniel Webster and Charles Sumner. Her influence in the nation has been great.

The population in 1875 was 1,651,912. The number of persons born here who have since moved to other states is, probably, as great as the present native population; and in their new homes they have had great influence on society and politics. The people are enterprising, industrious, and frugal; a large part of the paupers and criminals are of the foreign born.

QUESTIONS.—29. Early people? Tell about Massachusetts and his son. What Indian names have you? Are any Indians now living in the state? Who were the Pilgrims? Describe briefly their lives and their early settlements. 31. Who were the Britons? For their time, were they tolerant or intolerant? Relate a few historical incidents concerning them. What can you tell of the Indian and French wars? State the leading events of the "Revolution" in which Massachusetts took part. 32. When was the state government founded? When was the United States Constitution ratified? In what year was Maine set off? How was Massachusetts affected by the "War of 1812"? What part did the state take in the "Civil War"? 33. Population? What is said of the people?

XI. OCCUPATIONS AND PRODUCTIONS.

Of the entire population, there are engaged in active business 58 per cent, or 958,000.

Manufacture is a leading pursuit. This is due largely to the water-powers within the state. About 33 per cent of the workmen, or 316,000, a larger per cent than in any other state, are employed in factories.

The value of the manufactured products for 1875 was \$592,332,000; the capital employed, \$282,683,000; the value of stock used, \$100,000,000. The chief of these products for 1875 were boots and shoes, cotton and mixed goods, woolen goods, metallic goods, cloth, leather, machines and machinery, paper, furniture, carpetings, musical instruments, carriages and wagons, clocks and watches, glass, and agricultural implements.

35. **Ship-building** is carried on to a limited extent in the ocean counties. In 1875, vessels having a tonnage of 46,000, and valued at \$3,162,000, were built.

36. **Commerce, Trade, and Transportation.** Of the workingmen, about 11 per cent, or 105,000, are engaged in these industries.

This state is the second in the Union in the extent of its foreign commerce; its coastwise trade is also very extensive, chiefly from the ports of Boston, New Bedford, Newburyport, Salem, and Gloucester.

By the great trunk lines of railroad (the *Vermont Central Railroad* and the *Grand Trunk* of Canada; the *Tunnel Line*, through Fitchburg, Greenfield, North Adams, and Troy, N. Y., and the *Boston and Albany Railroad*, through Worcester, Springfield, and Pittsfield) Boston is connected with the grain fields and pastures of the West and South-west, and ships to foreign countries great quantities of grain and beef. It is also the entrepôt of foreign goods for New England and the West. The receipts, in 1877, of flour, corn, oats, and wheat amounted to \$14,000,000 in value.

37. **Railroads.** Within the state there are 1,854 miles of railroad. Eight lines center in Boston, connecting that city with all parts of the country—north, west, and south. The other chief railroad centers are Worcester, Springfield, Lowell, South Framingham, and Palmer. The principal railroad lines are:



Washington Elm, Cambridge.

The *Eastern Railroad*, via Lynn and Salem, to Portland, Me., and Halifax, N. S. Its chief branches within the state extend to Marblehead, to Gloucester and Rockport, and to Lawrence.

The *Boston and Maine Railroad*, via Lawrence to Portland, Me. Branches to Medford and Lowell; and from Wakefield to Peabody, and to Danvers, Georgetown, and Newburyport.

The *Boston, Lowell, and Nashua Railroad* to Nashua and Concord, N. H. Branches to Concord, Mass., and Woburn; and from Lowell to Lawrence, to Salem, and to Ayer.

The *Fitchburg Railroad*, with the *Vermont and Massachusetts*, and the *Troy and Greenfield*, via Hoosac Tunnel to Troy, N. Y. Branches to Waltham, and from South Acton to Marlboro'.

The *Boston and Albany Railroad*, via Worcester and Springfield, to Albany, N. Y. Branches to Brookline; and from South Framingham to Milford; and from Ashland to Milford and Woonsocket, R. I.

The *New York and New England Railroad*, via Blackstone and Willimantic, Conn., to New York. Branches to Norwood Center, to Needham and Medfield; and to Providence and Woonsocket, R. I.

The *Boston and Providence Railroad* to Providence, Rhode Island; with branches to Dedham, Stoughton, Taunton, and North Attleboro'.

The *Old Colony Railroad*, via Fall River to Newport, R. I. Branches: Braintree to Cohasset and Duxbury, and to Plymouth; Middleborough to Provincetown, on Cape Cod; and Wareham to Fair Haven.

The *Framingham and Lowell Railroad*, with its connections, joins Lowell, Framingham, Mansfield, Taunton, and New Bedford.

The *Boston, Clinton, and Fitchburg Railroad* joins Framingham with Marlboro', Clinton, and Fitchburg.

From Worcester the *Providence and Worcester Railroad* extends to Providence, R. I.; the *Norwich and Worcester* to Norwich, Conn.; the *Boston, Barre, and Gardner*, and *Monadnock*, via Winchendon to Concord, N. H.; the *Worcester and Nashua*, via Ayer to Nashua, N. H., and Portland, Me. From Palmer the *Ware River Railroad* extends to Winchendon; the *New London Northern* to New London, Conn., and via Amherst to Brattleboro, Vt. From Springfield the *Connecticut River Railroad* extends via Northampton and Greenfield to Brattleboro, Vt.; the *Springfield, Athol, and North-eastern* to Athol; the *New York, New Haven, and Hartford* to New York. From Westfield the *New Haven and Northampton Railroad* extends to Williamsburg and to New Haven, Conn. From Pittsfield the *Pittsfield and North Adams Railroad* extends to North Adams; the *Housatonic Railroad* via Stockbridge to Bridgeport, Conn. Besides these roads numerous branches reach almost every town in the state, except a few in Berkshire.

The *Massachusetts Central Railroad*, another line to connect Boston with the West, has been laid out and partly built through Hudson, Barre, and Northampton to the Hoosac Tunnel. This great tunnel through the Hoosac Mountain is $4\frac{3}{4}$ miles long; it is the longest in the world except the Mont Cenis Tunnel between Italy and France; it has been built at a cost to the state of \$17,000,000 as the easiest and most direct route for commerce through

the Berkshire hills to the great West; the highest point of the mountain is 1,718 feet above the road bed.

The elevations above the sea level, on the *Boston and Albany* road, are: at Worcester, 44 miles from Boston, 177 feet; at Charlton, 57 miles, 905 feet; at Springfield, 98 miles, 75 feet; at Washington, 135 miles, 1,450 feet; at Pittsfield, 151 miles, 968 feet; at Albany, 202 miles, 25 feet. On the *Tunnel Line*, at Fitchburg, 50 miles from Boston, 430 feet; at Ashburnham, 61 miles, 1,106 feet; at Greenfield, 106 miles, 182 feet; at the Tunnel, 136 miles, 838 feet; and at Troy, 191 miles, 50 feet.

38. **Agriculture.** In this pursuit are engaged 8 per cent, or 30,000, of the workingmen; but for food, Massachusetts depends largely upon the West.

39. **Domestic offices** engage 44 per cent of the productive classes of Massachusetts, or some 425,000 people, a large part of them women; hence, this industry represents those home products and comforts whose worth is far beyond their pecuniary value.

Among them are blankets, rag carpets, domestic clothing, dried fruit, gloves, leggings, mittens, quilts, scarfs, rugs, socks, stockings, etc. Some of the marketable products of this kind may be mentioned—such as butter, beef, pork, mutton, milk, eggs, cider, cheese, pickles, poultry, maple sugar, etc.; also, fire-wood, railroad-ties, and lumber.

40. **Fisheries** engage about 7,000 of the working population. The capital employed is \$7,270,000, and the product for 1875, \$7,685,000. The chief are cod (product, \$2,159,000), whale (product, \$2,186,000), and mackerel (product, \$1,924,000).

The principal ports engaged in cod fishing are, Gloucester (which produces about three-fourths), Provincetown, and Marblehead; in whaling, New Bedford (which produces six-sevenths), Provincetown, Dartmouth, and Fairhaven; in mackerel fishing, Gloucester (which produces one-half), Provincetown, Wellfleet, Boston, and Cohasset.

At Chicopee and Longmeadow, shad are caught. The cod and mackerel are obtained principally on the banks of Newfoundland. To secure the right to these fisheries, by a recent treaty, the United States pays the Dominion of Canada \$15,000,000. Sometime since, Nantucket owned the largest whale fisheries in the world. No whale ships now sail from that island. Whales are caught chiefly in the Pacific and Arctic oceans.

41. **Government offices and the professions** engage about 3 per cent of the workingmen, or about 30,000.

This includes: United States, state, and city and town-officers; United States Army and Navy officers; lawyers and court-officers; physicians and clergymen; authors, artists, musicians, actors, teachers, scientists, etc.

QUESTIONS.—34. What per cent of the people are actively employed? What per cent in manufactures? Why so many? Give the value of manufactured products for a single year. Name the leading articles of manufacture. 35. What is said of ship-building? 36. How does the state rank in commerce? What facilities for foreign trade? 37. How many miles of railroads in the state? Name the principal railroads. Other important lines. Describe the Hoosac Tunnel. Give elevations at different points. 38. Are many people engaged in agriculture? 39. What are domestic offices? Are many so employed? Mention principal products. 40. What is said of the fisheries? 41. How many in the professions?

XII. GOVERNMENT.

42. The **government**, under which the people of this Commonwealth live, is of a threefold character—the United States, the State, and the Town—each of which will be described in order:

(1) The *United States Government.* This determines matters affecting the whole country; such as our relations to foreign countries, declaring war and making peace, coining money, commerce, crimes on the high seas (that is, 3 miles or more from land), patent rights, copyrights, the post-office, etc.

(2) The *State Government.* This can do nothing inconsistent with the National authority, but regulates the relations of individuals within its borders, the ownership of property, and crimes against persons and property.

(3) The *Municipal Government;* that is, the government of a city or town. This can do nothing against the state authority; it makes police regulations, assesses taxes upon individuals, supports schools,

Besides these, several towns and cities, in greater or less number, are organized into *counties* for certain purposes; such as maintaining court-houses, jails, and houses of correction; laying out roads, etc., etc. The functions of counties are, of course, subordinate to the state authority.

In each of these there are 3 branches: The *Legislative*, which makes laws; the *Executive*, which puts them in force; and the *Judicial*, which interprets them.



Springfield

Entrance to Hoosac Tunnel.

Springfield and Watertown; to the Navy, the ships of war that protect our harbors; to the Post-office Department, the Postmaster and post-office in each town and city, where the letters and newspapers are distributed; to the Interior, the Commissioner of Education at Washington, who gathers statistics and disseminates information relating to schools, and the Commissioner of Patents, who secures to the rightful owners the value of their inventions.

The Army and Navy of the United States are under the direction of the President.

44. The **Legislative** consists of a Senate composed of two members from each state, and a House of Representatives, with a member for each 150,000 inhabitants. A Senator is chosen for 6 years, and the General Court (see paragraph 45). For the election of Representatives, Massachusetts is divided into 11 Congressional districts. The election takes place once in two years, in November.

*Chosen by electors from the several states, corresponding in number to the National Senators and Representatives to which each state is entitled (see paragraph 41); these electors are chosen by the people in November of each leap-year; on the ballot are usually printed the names of the men whom the electors are expected to vote for President and Vice-President.

UNITED STATES GOVERNMENT

43. Of the United States or General Government, the **Executive** is composed of a President and Vice-President,* and a Cabinet, appointed by the President, consisting of the Secretary of State, Secretary of the Treasury, Secretary of War, Secretary of the Navy, Secretary of the Interior, Postmaster-General, and Attorney-General.

Within this state, subordinate to these and belonging to the Treasury, are Collectors of Customs at the ports, who collect duties on exports and imports, and Collectors of Internal Revenue in the districts, who collect taxes on manufactures, etc.; to the War Department, the officers and soldiers who man the forts and carry on the arsenals, and

5. The Judicial consists of a Supreme Court, Circuit Courts, and District Courts.

The Supreme Court is composed of a Chief-Justice and eight Associate Justices, appointed by the President, and holding office during good behavior. One of these is assigned to each of the nine circuits into which the country is divided, and holds court there. A local Circuit Judge also lives in each. A Circuit is divided into several smaller Districts.

There are also a District Judge and other officers of these courts within this district, such as United States District Attorney, Marshal, etc. These courts are held in Boston.

The forts, arsenals, custom-houses, and post-offices belonging to the United States, are not subject to the state laws.

STATE GOVERNMENT.

3. Of the State Government, the Executive consists of a Governor and Lieutenant-Governor, chosen every year, in November, by the people, and eight counselors, chosen at the same time from the several districts into which the state is divided for this purpose.

Superior executive officers are the Sheriffs in the several counties (see paragraph 48) and the 21 state Constables, who are appointed by the Governor.

The state militia, consisting of officers and soldiers organized and equipped according to law, for preserving the peace in case of riot, etc., or for war, if necessary, are also at command of the Governor.



Gloucester, from Fort Point.

7. The Legislative consists of the General Court composed of 40 Senators, chosen by the people annually, one from each of the districts into which the state is divided for this purpose, and 238 Representatives, chosen in a similar way.

The Legislature meets annually on the first Wednesday in January, and generally remains in session about five months.

Joint committees, composed of three Senators and eight Representatives each, are appointed on many of the most important subjects; such as the Judiciary, Railways, Education, etc.; and questions are usually investigated by one of these committees before final action by the General Court.

8. The Judicial consists of a Supreme Court, composed of a Chief-Justice and 6 associates; a Superior Court, composed of a Chief-Justice and 10 Associates; and 47 Municipal and District Courts, each having jurisdiction over a county or some part of a county.

In towns not within any district, Trial Justices have the same jurisdiction as the District Court. In each county there is also a Court of Probate and Insolvency, to settle estates. All the judges are appointed by the Governor, and hold office during good behavior. The less important cases, and persons charged with minor crimes, are quickly tried in the lower courts. Appeals may be taken to the Supreme Court, in which persons charged with capital crimes and other important cases are tried.

Each county maintains buildings, at the county seat or capital, for holding courts, and preserving the records of the judgments of the courts and of the deeds of real estate.

9. The county officers are the Sheriff, the Registrar of Deeds, and the Assessor, each elected by the people for three years; the Registrar of Probate and the Clerk of the Courts, for five years: three County Commissioners are elected, one annually, and each for three years.

MUNICIPAL GOVERNMENT.

50. The functions of Municipal, or Town and City, Government include also the three departments, Executive, Legislative, and Judicial,—the town being only a miniature state, as the state is simply a smaller nation.

In each town there is a Board of three or more Selectmen, who attend to the general affairs of the town, and whose chairman is the executive officer; a Board of Assessors, who make the valuation and assess taxes; Overseers of the Poor; and a School Committee, who have control of the Public Schools. The legislative function is performed by the voters*—men of sound mind, not paupers or criminals, and able to read and write—in town meetings; the judicial, by the court of the district.

In a city, which is divided into wards corresponding in some respects to towns, the Mayor is the executive officer, elected by the voters of the whole city annually; subordinate to him are the Chief of Police, or City Marshal, and the Police force, whom he appoints.

The legislative function is performed by a City Council† composed of a Board of Aldermen elected by the voters of the whole city, usually a part each year and for a term of two or more years; a Common Council composed of several members from each ward, elected by the voters of the ward, usually a part each year; and a Board of School Committee consisting of three, or some multiple of three, members, elected by the voters for three years, a part each year, either by the city at large or by wards, and having exclusive control of the Public Schools. The judicial function of a city is usually performed by a Municipal or Police Court.

51. There are within the Commonwealth 19 cities and 325 towns. In each the people make such laws as they think necessary for their prosperity and happiness, so long as these laws do not conflict with those of the state or nation, or with the constitution of either; in like manner the people of the whole state, by their representatives in the General Court, make whatever laws they choose, subject only to the United States authority. In making the state laws, also, the people of the town have a voice; and the people of the state have a voice in making the United States laws. If the Governor or the President, or any officer of either municipal, state, or national government, does not use his authority justly or wisely, another will soon be chosen in his place.

This is called a representative government, because the officers are chosen, and the laws are made, by the people or by their representatives.

QUESTIONS.—42. State the threefold nature of government to which the people are subject. Define the province of each. What three departments in each? 43. Name the officers in the Executive department of the General Government. 44. How is the Legislative department composed? 45. The Judicial? 46. In the State Government, with whom is the Executive power vested? 47. The Legislative? 48. The Judicial? 49. Name the County officials.

50. Describe the several functions of Municipal Government. 51. How many cities and towns in Massachusetts? Describe the processes of a "representative government."

XIII. EDUCATION.

52. The education of the people has been a prime interest of this Commonwealth from the first. In 1636, £400 were appropriated from the public treasury to help found Harvard College, "to the end that learning may not be buried in the grave of our fathers." It is the belief that a people who are to govern themselves, and maintain the blessings of liberty, need to be intelligent.

There are two classes of public educational institutions:

I. Those under the direct control of the state, or of city and town authority; and,

II. Those conducted by a board of trustees, acting under a charter from the state, and having a semi-official character.

*This is pure democracy, where the people act for themselves instead of by their representatives.

†Created by the City Council is usually a Highway Department, a Fire Department, and Overseers of the Poor, Assessors, etc., and other officers who attend to special duties.

There are also private schools of various sorts and character, not needing special mention.

53. The general interests of the **Public Schools** are in charge of the State Board of Education, composed of the Governor and the Lieutenant-Governor, *ex-officiis*, and eight members appointed by the Governor, one each year, for a term of eight years.

This board elects a secretary, who is the executive officer, and two agents. These officers visit the schools throughout the Commonwealth, from time to time; hold Teachers' Institutes in the several counties, for instruction in methods of teaching, etc.; and make suggestions to the board for the improvement of the schools.

54. Under the direction of this board, also, five **State Normal Schools** are carried on for the professional training of teachers, viz.: at Framingham, Westfield, Salem, Bridgewater, and Worcester. These rank high among institutions of their kind.

The board makes recommendations to the legislature, from time to time, of such changes in the laws as the interests of education may require.

They also control the School Fund of the state, now amounting to \$2,067,790.54, one-half the income from which is expended for these general purposes; and the other half is distributed among the towns having less than 10,000 inhabitants, in the ratio of their school attendance.

A small appropriation is annually made for the Massachusetts Teachers' Association, and for County Associations, where the teachers of the state meet for the discussion of school questions.

55. Every child over five years old is required by law to attend school twenty weeks each year till the age of fourteen; and parents who neglect to send them, and persons who employ them unless they have attended school, are subject to a fine. Provision is also made for the confinement and the instruction of habitual truants; and these laws are enforced.

56. Each town and city is required to maintain, six months of the year, schools for all children between the ages of 5 and 15 years, where they may be taught the common English branches of study; and every town of 500 or more families must, in addition, maintain a High School for instruction in Latin and other higher studies. These schools provide what is called the *Elementary*, and the High School, the *Secondary*, education. They are carried on by the School Committee of the town.

In the cities, and in many of the larger towns, the committee elects a Superintendent, who gives his whole time to the management of the schools and the execution of the orders of the school committee.

Of these schools there are 3,317. The value of the buildings, sites, and other school property is \$22,298,988. The number of pupils, all ages, is 282,784; and yet there are within the state 77,550 persons over 21 years old who can neither read nor write, 26,656 who can not write, and 307 who can not read. Of all these, the foreign-born number 92,363.

57. For the Secondary education, corresponding to the High Schools, there are numerous **Academies**, incorporated under the laws of the state, controlled by a Board of Trustees, and supported in part by the income of funds, either given by the state or by private munificence, and in part by tuition fees paid by the students. Such are the Phillips

Academy at Andover; the Worcester Academy; the Wilbraham Academy; Dean Academy; the Monson Academy, etc.

58. For the Higher education, there are two **Universities**, and eight **Colleges**, five for men and three for women, supported by endowments from the state and from private citizens, and by the tuition fees of students.

These are for *men*: Harvard University, at Cambridge, which has, besides the Academic Department, a Museum of Comparative Zoology, and Schools of Law, Medicine, Dentistry, and two of Divinity; Boston University, at Boston, which has Schools of all Sciences, Theology, Law, Medicine, Oratory, and Liberal Arts; Williams College, at Williamstown; Amherst College, at Amherst; Tufts College at Medford, which has also a Divinity School; Holy Cross College, at Worcester; and Boston College, at Boston.

For *women*: Mount Holyoke Female Seminary, at South Hadley; Sophia Smith College, at Northampton; and Wellesley College, at Wellesley.

59. The following **Technical and Professional Schools**, also supported by endowments and tuition fees, as above, deserve especial mention:

Massachusetts Agricultural College, at Amherst; Massachusetts Institute of Technology, at Boston; the Free Institute of Industrial Science, at Worcester; the Lawrence Scientific School, at Cambridge; Andover Theological School

at Andover; Newton Theological Institution, at Newton Centre; New Church Theological School at Waltham; New England male Medical School, at Boston; Boston Dental College, Boston; and Massachusetts College of Pharmacy, at Boston.

Of the Incorporated Schools the value of buildings and other property, is \$4,651,000. This, however, does not include a large amount of funds, which income goes to pay for instruction.

60. Next to the Schools and Colleges, the most valuable educational institution is the **Free Public Library**. Any town may legally appropriate a sum of money equal to one dollar for each ratable poll in town, to found a Public

Library, and one-half this sum annually to carry it on.

These libraries in the principal towns bring thousands of books within reach of all citizens. In many of the towns and cities, men of wealth and benevolence have donated large sums of money to found free libraries and reading-rooms where magazines and newspapers are accessible to all citizens.

61. This state has taken the lead in establishments for the relief of the unfortunate, for the reform of criminals, and for protecting the health of its citizens. A State Board of Health is constantly employed in searching for the causes of disease, in all parts of the state. A Board of State Charities looks after the poor, and the minor criminals. The blind, the deaf, and the insane are all cared for of the state; and humane efforts are made through official, as well as through private channels, to reform even the harder criminals.

Of the public institutions for these worthy objects are: Lunatic Hospital at Worcester, Taunton, Northampton, and Danvers (the first and the last of these have cost, within the last three years, nearly \$1,500,000 each for buildings alone); the McLane Insane Asylum, Somerville; South Boston Insane Hospital, Boston; Insane Asylum, Ipswich; Herbert Hall, Worcester; Massachusetts Ear and Eye Infirmary, at Boston; the Massachusetts School for Idiotic and Feeble-minded Youth, at South Boston; the Perkins Institution and Massachusetts Asylum for the Blind, at South Boston; the State Reformatory School for Boys, at Westborough; the State Industrial School for Girls, at Lancaster; The State Primary School, at Monson (to these last three are committed children under 16 years of age who have been convicted of crime);



Quadrangle, Harvard University.

Alms-house, at Tewksbury; the State Workhouse, at Bridgewater; the Prison, at Concord; the Reformatory Prison for Women, at Sherborn.

schools.—52. Why is public education important? What was the first towards it, and when? Name the two classes of public educational institutions. 53. Of the first, who have general charge? 54. What Normal Schools are there, and what are they for? 55. What children must go to school, and how long? 56. How long each year must a town maintain schools? What must a town have a High School? 57. What is said of Academies? 58. Of Normal Schools and Colleges? 59. Of Technical and Professional Schools? Name the principal institutions of each kind. 60. What is the provision for Public Libraries? 61. How does Massachusetts rank with regard to her penitentiaries and penal institutions? Name the most important ones.

XIV. COUNTIES.

Franklin, capital Pittsfield; incorporated 1761; part of Hampshire; 31 towns; population 68,270; the western county of Massachusetts, extends from Vermont to Connecticut, is drained by the Hoosic, Westfield, and Housatonic rivers, and has abundant water-power. The surface is diversified by mountains, hills, valleys, and the scenery is very picturesque.

Greenfield, capital Greenfield; incorporated 1811; part of Hampshire; 26 towns; population 33,696; between Berkshire and Worcester, has Vermont and New Hampshire on the north, and Hampshire County on the south. The Connecticut River cuts it from north to south; and Millers and the Deerfield, east and west. The surface is partly broken by hills and mountains, but the alluvial plains are very fertile. Cattle, horses, and sheep are raised here, and the manufactures are extensive.

Hampden, capital Northampton; incorporated 1662; 23 towns; population 100,000; between Franklin, Worcester, Hampden, and Berkshire, the only inland county, is intersected by the Connecticut River. Mount Holyoke and the Green Mountains in the west, are the principal features. The soil along the river is remarkably fertile, and the scenery beautiful. Tobacco, live-stock, dairy products, and manufactures are important.

Hampshire, capital Springfield; incorporated 1812; part of Hampshire; 2 cities; population 94,304; extends from Berkshire to Worcester, and from Hampshire County to Connecticut. It is intersected by the Connecticut River, which flows the Chicopee and the Westfield. In soil, scenery, products, and manufactures, it resembles Hampshire County. Six railroads run through it, entering at Springfield, Westfield, and Palmer.

Worcester, capitals Worcester and Fitchburg; incorporated 1731; 2 cities; 56 towns; population 210,295; the largest county in the state, extends from New Hampshire to Connecticut and Rhode Island, and has the three last-named counties on the west, and Middlesex and Norfolk on the east. It is drained by the Blackstone, Chicopee, Ware, and Nashua rivers. The surface is generally rolling, and most of the soil is naturally or artificially fertile. There are in the county 2,000 manufacturing establishments. Hay, potatoes, Indian corn, and garden and dairy products are the staples.

Middlesex, capitals Lowell and Cambridge; incorporated 1643; 4 cities; 50 towns; population 284,112; is bordered by New Hampshire and Essex, Suffolk, Worcester, and Berkshire counties; and traversed by the rivers Merrimac, Nashua, Concord, and Charles. It is uneven, but well cultivated and productive. Potatoes, live-stock, and garden and dairy products are extensively raised. The manufactures are very important. It is traversed by numerous railroads.

Suffolk, capitals Salem, Newburyport, and Lawrence; incorporated 1643; 6 cities; 29 towns; population 223,342; borders on Middlesex and Suffolk counties, the Atlantic ocean, and New Hampshire. The surface near the sea is rough and hilly. The Merrimac River flows through the north-east part of the county. The people of several towns are extensively engaged in fishery. Fruit, grain, and garden products are raised; and carriages, machinery, and shoes are manufactured to a large extent. Ice and granite are largely exported.

Suffolk, capital Boston; incorporated 1643; 2 cities; 2 towns; population 1,000,000; is the largest in population, though one of the smallest in extent. It is situated on Massachusetts Bay, and joins Essex, Middlesex, and Norfolk. Its manufactures, 2,546 in number, are extensive, with a capital of \$48,000,000, employing 43,550 operatives, raw material costing \$60,000,000, and producing \$100,000,000 in value annually.

Suffolk, capital Dedham; incorporated 1793; 24 towns; population 88,321; between the State of Rhode Island, Middlesex, Suffolk, and Plymouth counties, and the Atlantic ocean. Cohasset is detached by part of Plymouth County. The manufactures are varied and extensive. The county is traversed by numerous railroads. Blue Hill is the greatest elevation.

Taunton, capitals Taunton, Fall River, and New Bedford; incorporated 1685; 16 towns; population 131,087; joins Rhode Island, and Norfolk and

Plymouth counties, and Buzzards Bay. It is drained by the Taunton River and other streams, which afford good water-power. The surface is nearly level, and the soil partly fertile. It has many good harbors. Garden products, wool, and grain are raised. The manufactures of iron, cotton, and woolen goods are very important. It is intersected by numerous railroads.

Plymouth, capital Plymouth; incorporated 1685; 27 towns; population 69,362; joins Bristol, Norfolk, and Barnstable counties, and Massachusetts and Buzzards Bay. Parts of the surface are sandy, rocky, and swampy; but under skillful cultivation the soil is productive. Large tracts of cedar and hard-pine forests furnish lumber. The iron, and boot and shoe manufactures are important. The "Old Colony" and "Cape Cod" railroads, and their branches, traverse the county.

Barnstable, capital Barnstable; incorporated 1685; 14 towns; population 32,144; the most eastern county; occupies the peninsula of Cape Cod, 60 miles long. It joins Plymouth County, and is bounded east and south by the Atlantic, and west by Buzzards and Cape Cod Bays. The soil is light and sandy. Dairy products, corn, and wool are raised to some extent. Fisheries and navigation engage many of the people.

Dukes, capital Edgartown; incorporated 1683; 5 towns; population 4,071; consists of Martha's Vineyard, a famous summer resort, and other smaller islands in the Atlantic. Many of the inhabitants are engaged in fishing. The county receives its name from the fact that it was under the government of the Duke of York (King James II. of England), it having been a part of New York till 1692.

Nantucket, incorporated 1635; population 3,201; is composed of the town and island of Nantucket, and four small islands. It was formerly engaged in the whale fishery. It is becoming known as a summer resort.



Lynn.

XV. CITIES AND TOWNS.

Boston (settled 1630; incorporated 1822; population 341,119; value \$795,638,000), the capital of Massachusetts, and the seat of justice of Suffolk County, is the metropolis of New England and an important commercial city. It is situated on the west side of Massachusetts Bay, at the mouth of the Charles River, and is 232 miles north-east from New York, 200 miles about east from Albany, and 44 miles about north-east from Providence by railroad. It was built on a peninsula; but many thousand acres of the Back Bay and the South Boston Flats have been filled and join the peninsula to the main land.

The city includes South Boston and East Boston, the latter occupying an island nearly two miles long. Roxbury, Dorchester, Charlestown, West Roxbury, and Brighton have recently been annexed, though these districts retain their original names; the city has an extent of about 13 miles in length and eight in breadth. It is supplied with water from the Sudbury River and Cochituate Lake, 20 miles west of the city, and Mystic Lake in the towns of Arlington and Winchester. Bridges connect it with Cambridgeport, East Cambridge, Chelsea, and Everett. Washington and Tremont streets are busy thoroughfares, the former having been lately extended through the most closely built part of the city to Haymarket Square.

The city has a fine park, called Boston Common, containing nearly 50 acres, covered with lofty trees and ornamented with beautiful fountains and

artificial lakes. Near this is the Public Garden, in which is a fine equestrian statue of Washington, a statue of Everett, a monument to the discoverer of *anaesthesia*, and other works of art. Extending from the Public Garden is Commonwealth Avenue, a broad street, with an ornamental mall stretching through the middle, and palatial residences on either side.

The spacious harbor is sheltered by two peninsulas and numerous islands, and defended by Forts Warren, Winthrop, and Independence. It is four miles long, and has an area of 75 square miles, half of which affords good anchorage for the largest ships. The entrance is marked by four light-houses: Minot's Ledge light, where once a structure resting on iron piers went down in a storm (it has been replaced by a granite tower 100 feet high); Boston light, on Little Brewster Island, 80 feet high, the Narrows light, on Great Brewster Island; and Long Island Head light.

Among the most noted public buildings are the State-house, on Beacon Hill, fronting the Common (from its cupola, the view of the city, the harbor, and the country around, is unsurpassed; on the grass plat in front are bronze statues of Daniel Webster, the great statesman, and Horace Mann, the founder of the Public School system); the Custom-house, a granite structure, with dome and roof of solid stone; the City Hall, on School Street, with its bronze statue of Benjamin Franklin, a Boston boy; the Masonic Temple; Horticultural Hall; Quincy Market; United States Post-office; and Music Hall, one of the finest in the country, with the great organ of nearly 6,000 pipes, that cost \$30,000. Among the scenes of historic interest are Bunker Hill, in the Charlestown district, the site of the battle being marked by a square granite shaft 220 feet high, having a winding stairway within leading to the top; Faneuil Hall, called the "Cradle of Liberty," where the Revolutionary Patriots met to deliberate; Dorchester Heights, an important point in the siege of Boston by the provincial troops; the Old South Church, at the corner of Washington and Milk streets, which was occupied by British troops; and Fort Independence, in revolutionary times the chief seaward defense of the town, then known as "Castle William."

The manufactures of Boston are varied and extensive, including ship-building, machinery, furniture, oil and sugar-refining, leather dressing, clothing, jewelry, chemicals, boots and shoes, etc. It is an important center of the leather, boot and shoe, wool, and dry-goods trades, both domestic and foreign. Its India and China trade was injured by the civil war, but is now partly restored. In foreign commerce Boston is the second city in the United States. The total value of its imports exceeds \$60,000,000 annually; and that of its exports, \$20,000,000; the arrivals of vessels being 10,000 yearly. The chief exports are beef, grain and lumber, fish and ice. Steamships of the Cunard line sail weekly from East Boston to Liverpool. There are in the city 60 National Banks, with a capital of about \$50,000,000.

The United States Navy-yard, situated in the Charlestown district, is one of the largest and finest in the country.

Boston has an excellent system of graded schools, more than 460 in all, with about 1,200 teachers, and an attendance of 48,500 pupils. The city contains more than 170 churches; and it is distinguished for its numerous literary and scientific institutions, from which it has received the name of "The Athens of America." Among these are: the Athenæum, whose building and site cost \$190,000, and which contains a library of 100,000 volumes, besides galleries of painting and sculpture; the American Academy of Arts and Sciences; the Boston Public Library, one of the largest in the country, which cost more than \$360,000, and contains about 275,000 volumes; the Massachusetts Historical Society; the Massachusetts Horticultural Society; and the Lowell Institute, which has a fund of \$250,000 to maintain free lectures on chemistry, physics, etc.

A destructive fire, in 1872, swept away 776 buildings in the heart of the city, valued at \$25,000,000, and covering an area of 65 acres. The loss, which fell chiefly upon the shoe, leather, and wool interests, was estimated at \$60,000,000. Fourteen lives are known to have been lost. The burnt district has since been rebuilt with business houses, even more elegant than those which were destroyed.

Lowell (incorporated 1836; population 49,688; value \$39,300,000), one of the two capitals of Middlesex County, and the second city in size in the state, is situated on the Merrimac, near the mouth of the Concord, 26 miles north-west from Boston. It is one of the leading seats of the cotton manufacture in the United States. Twelve corporations, with a capital of \$16,000,000, employ 16,000 operatives, and manufacture more than 2,500,000 yards of cotton cloth a week, besides woolen goods, carpets, shawls, hosiery, etc. There are also important iron works here, which employ 1,200 hands. The city derives its importance from its valuable water-power—the fall of the Merrimac within the city being 30 feet. It contains two Public Libraries, an Orphan Asylum, an Old Ladies' Home, a Young Woman's Home, and other charitable institutions. Seven railroads center here.

Worcester (settled 1684, incorporated 1848; population 49,317; value \$53,488,000), one of the two capitals of Worcester County, is situated near the head-water of the Blackstone, and within a circle of hills, 44 miles west from Boston. From its position near the geographical center of the state, and its social importance, it has been called the "Heart of the Commonwealth." It is the seat of a great variety of manufactures, including boots and shoes, machinery, steam-engines, railroad iron, fire-arms, card-clothing, folding-chairs, carriages, looms, musical instruments, and wire; the wire-works located here are the largest in the world. Railroads extend in six directions. Mechanics' Hall is one of the finest and largest in the state, and, from the accessibility of the place, state conventions, political and other, are often held here. Of the public institutions, the chief are the American Antiquarian Library, Free Public Library, Worcester County Free Institute, Holy Cross College, Highland Military Academy, State Normal School, Worcester Academy, Oread Institute, Public High School, Natural History Society, etc.

Cambridge (settled 1630, incorporated 1846; population 47,838; value \$66,081,000), a capital of Middlesex County, is situated on a broad plain on the north-west bank of the Charles River. It is the second city in the state in wealth, the fourth in population, and is chiefly noted as the seat of Harvard University, the oldest, and in other respects the first college in the United States. There are extensive printing establishments in the city, which make some of the best books in the country. It is the home of many literary and scientific men, whose grand old houses are models of taste and refinement—among them the poets, Henry W. Longfellow and James Russell Lowell. No city on the continent is superior to this in cultured society. Memorial Hall is an elegant structure on the University grounds, erected by the alumni in memory of their brothers who fell in the civil war. In Cambridge stands the old elm tree under which Washington took command of the provincial troops in 1775.



Longfellow's Home, Cambridge.

Fall River (settled 1659; incorporated 1846; population 45,340; value \$50,382,000), one of the three capitals of Bristol County, is situated on the east side of Mount Hope Bay, an arm of the Narragansett, at the mouth of the Taunton River, 20 miles from the sea and 100 miles south from Boston. It is at the head of deep water navigation, being connected with New York by a daily line of steamers; and, besides, it has superior water-power from Watuppa Lake. Its chief industries are iron works, that turn out 120,000 kegs of nails yearly; two print works, making 75,000,000 yards of calico yearly; 38 cotton mills, which produce 300,000,000 yards of cotton cloth per annum, more than one-half of all that is made in the United States; a bleachery; and numerous mechanical enterprises; a large coal-trade and shipping-trade; and immense granite quarries. Its public institutions, are a C-

dren's Home, Free Public Library, etc.

Lawrence (incorporated 1853; population 34,916; value \$23,329,000), one of the three capitals of Essex County, is situated on both sides of the Merrimac, 26 miles north-west from Boston. It was named for the Lawrence family of Boston, who developed its industries. The river has a gradual fall within the city of 26 feet. This led to its selection, in 1845, as a manufacturing center. A magnificent granite dam was thrown across the river, 900 feet long and 100 feet high, at a cost of \$250,000, and a canal, 1½ miles long and 90 feet wide, has been built on the north side of the river, which is lined with factories. A second canal has lately been built on the opposite side. Three of the principal corporations employ 10,000 operatives. The Pacific Mills are noted for the educational and social advantages afforded the operatives, with a library of 6,000 volumes, reading-room, relief societies, hospitals for the sick, and aged, etc. The original Pemberton Mill, a brick structure, fell in 1860, burying 700 persons in the ruins, 91 of whom were killed or mortally injured. Lawrence has a beautiful Common, Court-house, City Hall, Masonic Temple, Odd Fellows' and Music halls, several institutions of public and private benevolence, and manufactures of machinery, carriages, hardware, and flour.

Lynn (settled 1629; incorporated 1849; population 32,600; value \$27,713,000), lies on the coast, about 10 miles north-east from Boston, with which it is connected by two lines of steam-cars and one of horse-cars. Its harbor is protected by the peninsula of Nahant. From its nearness to Boston, and its position on the coast, the city and the peninsula are favorite summer resorts. It has an ornamental Common, a fine Soldier's Monument, and several beautiful public buildings, among which are the City Hall, Music Hall, Odd Fellows', and exchange halls. The city is the first in the country in the manufacture of men's boots and shoes; it has also an extensive trade in kid and morocco leather. The first fire-engine was made here.

Springfield (settled 1636; incorporated 1852; population 31,053; value \$41,742,000), the capital of Hampden County, is beautifully situated on the east bank

GEOGRAPHY

Connecticut, 98 miles from Boston, and 138 miles north-east from New York. The western part of the city is level. In the eastern part, the hills afford sites for many beautiful residences. Five railroads center here. The United States Armory is located on the high ground in the eastern part of the city. The heavy work is done in the southernly part, on Mill River. It employed about 350 men, though during the Civil War 3,000 men were employed in the manufacture of 1,000 rifles daily. The value of manufactures in the city exceeds \$10,000,000 yearly. The City Library building is one of the best in the State, and contains 39,500 volumes, besides a museum of natural history and geology. Indian Orchard is a thriving suburb in the east part of the city. The town was burned by the Indians during King Philip's War, in 1675.

Andover (settled 1626; incorporated 1836, population 25,958, value \$27,674,000), one of the capitals of Essex County, is situated on a small bay, protected by the town of Marblehead. It is on the line of the "Eastern Railroad," and is also connected by rail with Lowell and Lawrence. For many years it was the chief commercial port of the New England colonies; but its harbor is not deep, so that its commerce has gone to Boston and New York. It has now a large foreign trade, chiefly of coal. The Essex Institute, the Peabody Academy of Science, and the State Normal School are among its noted institutions. The chief industry is the manufacture of leather. When, during the Revolution, the town was blockaded, Salem opened its harbor to her ships. Here first the town of Andover was represented as a sovereign power; and the British were repulsed.

Bedford (incorporated 1847; population 25,895; value \$25,000,000), one of the capitals of Brimley County, is situated on the Acushnet River, 55 miles from Boston, to which it is connected by two routes of railroad. It was formerly the chief port of the American fishery, which was quite extensively carried on. Bedford has an excellent harbor. Its industries embrace cotton and woolen works, iron works, copper rolling works, tin blue and red paint works, the candle factory, shoe factories, and other works, etc. In the town are a Friends' Academy, St. John's Hospital, Free Public Library, etc.

Beverly (incorporated 1871; population 21,868; value \$29,334,000), 3 miles from Boston, is connected with that city by three lines of railroad. Its manufactures include brass-tubing, glass-bottles, art-material, etc. Many hills within the town are covered with fine residences, and command pleasing views of the city; they also possess historic interest.

Chelsea (incorporated 1851; population 20,737; value \$18,270,000), a city of Essex County, is a suburb of Boston, three or four miles north-east from the city. It is connected with Charlestown district by the Chelsea Bridge across the Mystic River; and with Boston proper, by the "Eastern Railroad" ferry $1\frac{1}{2}$ miles across, called Winnisimmet, the ancient Indian name of the town. Chelsea Creek separates it from East Boston. It contains a United States Marine Hospital and Naval Powder Magazine. It is chiefly a residential town, but has also important manufactures.

Taunton (settled 1639; incorporated 1864; population 20,445; value \$17,773,000), one of the capitals of Bristol County, is situated in the valley of the Taunton River, 33 miles south from Boston. It is connected by rail with Boston, New Bedford, Fall River, and Providence. Its manufactures include locomotives, steam-engines, cotton-machinery, Britannia-ware, tacks, etc. The capital employed exceeds \$2,500,000. Its charitable institutions are a Home for Aged Persons, a City Mission with a commodious chapel, and an Academy.

Ware (settled 1623; incorporated 1873; population 16,754; value \$19,166,000), a city of Essex County, situated on the promontory of Cape Ann, 28 miles north-east from Boston, with which it is connected by rail. It has a fine harbor.

The chief industries are fisheries and granite quarrying. In the cod and mackerel fishery it ranks the first in the State, if not in the world. It is also a popular summer resort.

Holyoke (incorporated 1873; population 16,260; value \$10,631,000) is situated on the Connecticut River, eight miles north from Springfield, with which it is connected by rail; it is also the terminus of the "Holyoke and Westfield Railroad." It has an immense water-power, utilized by an excellent dam across the Connecticut River. The chief manufactures are paper (17 paper mills), cotton and woolen goods, wire, etc. The City Hall is a granite structure which cost about \$220,000.

Newton (incorporated 1873, population 16,105; value \$30,867,000) is situated in a beautiful region on the Charles River, eight miles west from Boston, with which it is connected by two lines of steam- and one of horse-cars. It is a city of great wealth, the home of many princely merchants of Boston. The Newton Theological Institution, Lasell Female Seminary, two Academies, a Lyceum, a Free and three other Public Libraries, and two Asylums are among its public institutions.

Haverhill (settled 1640; incorporated 1869; population 14,628; value \$10,980,000) is situated at the head of tide-water, on the Merrimac, 18 miles from its mouth, and 32 miles north from Boston, with which it is connected by two lines of railroad. It is also connected by rail with Newburyport and Portland, Maine.

Shoe manufactures and other collateral occupations are the leading industries; hats, woolen goods, and other articles are also produced. In the city are a fine Masonic Temple, City Hall, High School, etc. In colonial times this was a frontier settlement, exposed to frequent Indian attacks.

Newburyport (incorporated 1851; population 13,323; value \$7,975,000), a capital of Essex County, is situated at the mouth of the Merrimac, 35 miles north-east from Boston, on the "Eastern Railroad." It contains four ship-yards; and about 100 vessels of various kinds are owned here.

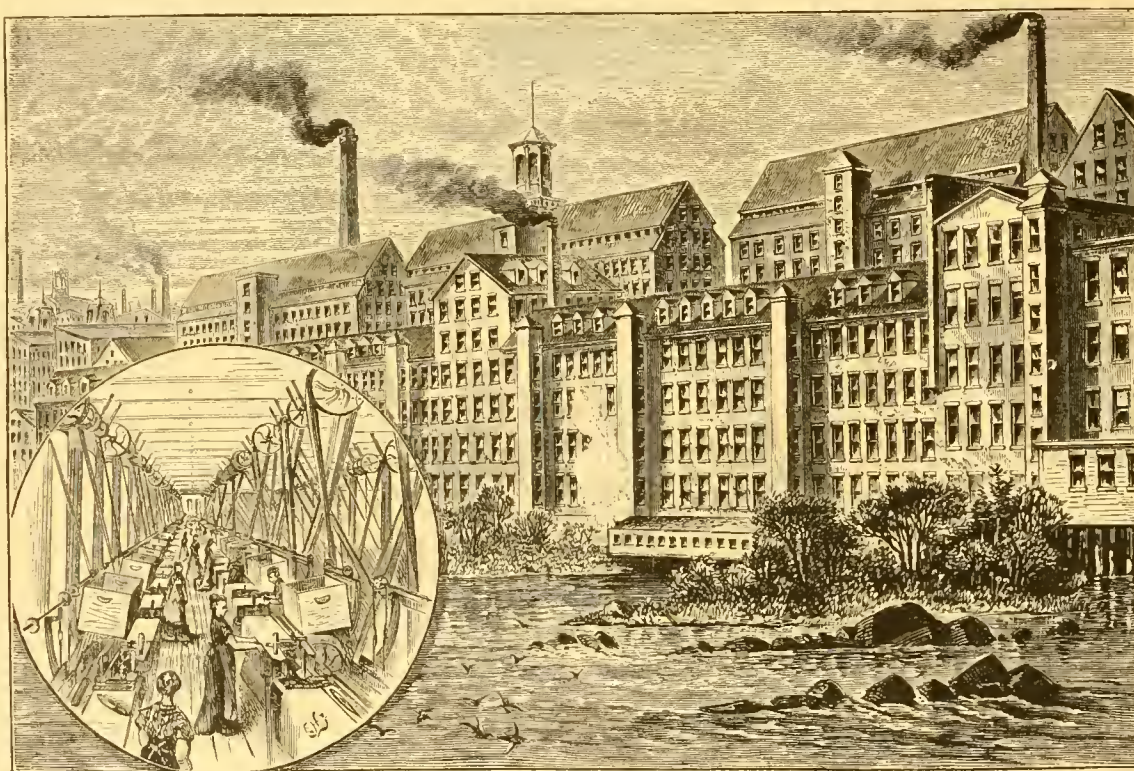
Cotton mills, shoe-factories, an iron foundry, etc., are among its manufactures. The principal literary institutions are the Putnam Free School, Public Library, Free Reading-room, etc.

Fitchburg (incorporated 1872; population 12,289; value \$13,217,000), one of the capitals of Worcester County, is situated on a branch of the Nashua River, fifty miles north-west from Boston. Five lines of railroad center here. Its principal manufactures are paper, chairs, machinery, woolen goods, etc., whose annual product is nearly \$5,000,000.

TOWNS.

Adams (incorporated 1778; population 15,760; value \$6,635,000) is situated in the valley of the Hoosic River, at the west end of the Hoosac Tunnel, 143 miles from Boston. The town was divided in 1878 into North Adams and Adams. These have extensive manufactures of cotton and woolen goods, paper, nitro-glycerine, boots and shoes, etc. Many Chinese are employed in the boot and shoe factories.

Pittsfield (incorporated 1761; population 12,267; value \$9,402,000), the capital of Berkshire County, in the valley of the Housatonic River, is 151 miles from Boston, on the "Boston and Albany Railroad," 1,200 feet above the sea level. Around it are six beautiful lakes, whose waters flow into streams, the one to the east and the other to the west of the village, which unite to form the Housatonic. These lakes add much to the picturesqueness of the scenery; they afford excellent water-power, which is used in the manufacture of cotton



Cotton Mill at Lawrence.

and woolen goods, silk, and tacks. The town contains a Park, a Public Library of 7,000 volumes, works of art, etc., "Maplewood," a Young Ladies' Seminary, and a Home for the Disabled.

Northampton (incorporated 1654; population 11,108; value \$7,857,000), the capital of Hampshire County, is situated on the Connecticut River, 17 miles north from Springfield. Its manufactures include sewing machines and a variety of other articles. Among its institutions are a Female Seminary, State Lunatic Asylum, the Smith Charities, Smith College for Women, the foremost of its kind, and the Clark Institute for Deaf Mutes.

Malden (incorporated 1649; population 10,843; value \$9,731,000), situated on the "Boston and Maine Railroad," four miles north from Boston, is a residential town, with excellent schools, churches, a Lyceum, etc.

Brocton (incorporated 1874; population 10,578; value \$5,590,000), on the "Old Colony Railroad," in Plymouth County, 20 miles south of Boston, formerly called North Bridgewater, has large boot and shoe factories, and a good trade.

Chicopee (incorporated 1848; population 10,331; value \$5,861,000), situated on the Connecticut River, at the mouth of the Chicopee, is four miles north from Springfield by railroad. It has large manufactories of cotton, swords, cutlery, machinery, and brass cannon. The Ames Company have here the largest manufactory of swords in the United States.

Waltham (incorporated 1737; population 9,945; value \$10,257,000) is situated on the Charles River, nine miles west from Boston, on the "Fitchburg Railroad." The American Watch Company's factory, the largest in the country, and the one in which watch-making by machinery was first thoroughly introduced is located here.

Weymouth (incorporated 1635; population 9,819; value \$6,119,000), called by the Indians Wessagusset, the second oldest settlement in the state [1626], is situated 11 miles south from Boston, on the South Shore branch of the "Old Colony Railroad."

Milford (incorporated 1780; population 9,818; value \$5,107,000), which the Indians called Wopowage, situated in Worcester County, 30 miles south-west from Boston, on a branch of the "Boston and Albany Railroad," is a large boot manufacturing center.

Woburn (incorporated 1642; population 9,568; value \$8,767,000) is situated on the "Boston, Lowell, and Nashua Railroad," 10 miles north-west from Boston. The principal manufacture is leather; a tannery was established here in 1673.

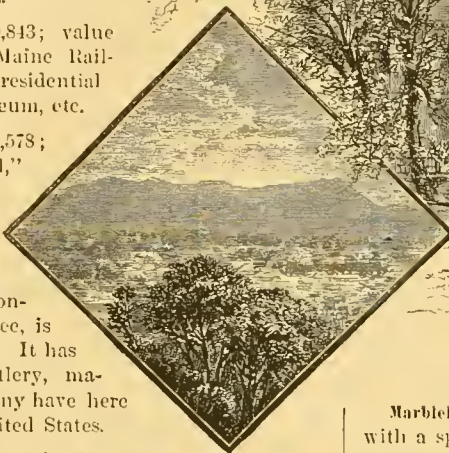
Attleboro' (incorporated 1694; population 9,224; value \$4,627,000), 30 miles south-south-west from Boston, on the "Boston and Providence Railroad," has extensive manufactures of jewelry, calicoes, clocks, buttons, etc.

Quincy (incorporated 1792; population 9,155; value \$7,203,000), named for Hon. John Quincy, on the "Old Colony Railroad," eight miles south from Boston, is one of the oldest towns in New England, it having been part of Braintree. Ship-building has been carried on here for more than 150 years; some of the finest ships in the country have been launched from Quincy Point. Granite is the staple product of the town. Bunker Hill Monument was built from it. The first railroad in the United States was built here, in 1827, to transport granite to the vessels. Here was the birth-place of the presidents, John Adams and his son John Quincy Adams. In the town are a Public Library, the Adams Academy, an excellent institution, and a State Home for Infirm Sailors.

Westfield (incorporated 1669; population 8,429; value \$7,337,000). Indian name Waranoke, is situated on the Westfield River, nine miles west from Springfield, by the "Boston and Albany Railroad," in a beautiful valley at the southern continuation of the Green Mountains. Its prominent manufactures are whips, of which it produces more than all the country besides; cigars, in which are used 340 tons of tobacco yearly, most of which is raised in the Connecticut Valley; paper, a thick variety of which is used in the manufacture of racing boats; machine belting, palls, etc. The church-organ works, since 1844, have built nearly 500 organs. In the town are a State Normal School and Public Library.

Marlboro' (incorporated 1660; population 8,424; value \$3,285,000), Indian name Okonmakamesitt, is on the "Fitchburg Railroad," 25 miles west from Boston. It contains 25 boot and shoe factories, one of which is among the largest in the world.

Peabody (incorporated 1855; population 8,066; value \$6,763,000) is situated on the "Salem and Lowell," and one branch of the "Eastern Railroad," five miles west from Salem. It is the birth-place of George Peabody, the London millionaire, for whom the town is named; he founded here, in 1855, the Peabody Institute, to which he gave \$200,000. His bequests to benevolent and educational objects reach the sum of \$7,000,000.



Connecticut Valley and Smith College, Northampton.

Marblehead (incorporated 1649; population 7,677; value \$4,247,000), a seaport with a spacious and deep harbor, is situated on a branch of the "Eastern Railroad," 20 miles north-east from Boston. Its chief industry is the shoe manufacture. It is a beautiful summer resort.

Natick (incorporated 1762; population 7,419; value \$3,708,000) is situated on the "Boston and Albany Railroad," 12 miles west from Boston. The principal business is shoe manufacture; there are also manufactories of hats and carriages. It has a Public Library of 10,000 volumes.

Beverly (incorporated 1668; population 7,263; value \$8,931,000), situated on small inlet of the ocean north-east of Salem, is on the "Eastern Railroad," 12 miles from Boston. It is chiefly important for its commerce and fisheries; but it has also manufactories of shoes, carriages, and cotton and woolen goods.

Clinton (incorporated 1830; population 6,781; value \$4,548,000), on the Nashua River, 44 miles north-west from Boston, on the "Boston, Clinton and Fitchburg Railroad," has fine water-power, and manufactures wire-cloth, combs, cotton yarn, gingham, Brussels and Wilton carpets, etc.

Brookline (incorporated 1705; population 6,675; value \$30,769,000), the home of many wealthy merchants, is situated on the Charles River, four miles west from Boston, with which it is connected by the "Boston and Albany," and the "New York and New England" railroads. It is the richest town in the state. It has a fine Public Library building and a granite Town-house.

Melrose (incorporated 1639; population 6,627; value \$9,736,000), on the Mystic River, five miles north from Boston, is connected with the city by the "Boston and Lowell" and the "Boston and Maine" railroads. Rum and crackers are largely manufactured here. It has a Public Library, and is the seat of Tufts College.

Plymouth (incorporated 1620; population 6,370; value \$4,565,000), Indian name Acomack, the capital of Plymouth County, situated on Massachusetts Bay, 37 miles south-east from Boston, on the "Old Colony Railroad," is celebrated as the landing-place of the Pilgrim Fathers, and as the first settlement in New England. The climate is very healthy. There is a variety of manufactures, some commercial business, and a fleet of vessels engaged in the Newfoundland fisheries. It contains many points of interest connected with the early settlers; Forefathers' Monument, an imposing structure, is nearly completed.

Hyde Park (incorporated 1868; population 6,316; value \$6,545,000), on the Neponset River, seven miles south-west from Boston on the "Boston and Providence" and the "New York and New England" railroads, is chiefly a place of residence for people who do business in Boston.

Danvers (incorporated 1757; population 6,024; value \$3,928,000) is north-west of Salem, and 19 miles north from Boston, by the "Boston and Maine" and "Eastern" railroads. Its manufactures are leather, shoes, carpets, and bricks.

Williamstown, in Berkshire County, is noted as the seat of Williams' College. Mt. Greylock is within the town, and Sand Springs, a well known summer resort.

Amherst, a pleasant village in Hampshire County, is the seat of Amherst College and of the State Agricultural College.

Amesbury, north-west from Newburyport, is engaged in carriage manufacture.

Westborough, on the "Boston and Albany Railroad," builds sleighs extensively. It is the seat of the State Reform School for Boys.

GEOGRAPHY OF MASSACHUSETTS.

Watertown, seven miles from Boston, on the "Fitchburg Railroad," has a United States Arsenal and the beautiful Mt. Auburn Cemetery.

Andover, 23 miles north from Boston, on the "Boston and Maine Railroad," is the seat of Phillips Academy and a Theological Seminary.

Uxbridge, 21 miles south-west from Boston, on the "Boston and Providence Railroad," is noted for its straw hat and bonnet factories.

Worcester, on the "Boston and Albany Railroad," has extensive granite quarries and bonnet factories.

Ware, on the Housatonic River, and Sandwich, on Cape Cod, manufacture and glass-ware.

Worcester, on the Housatonic River, has extensive paper mills.

Ware, on the "Boston and Maine Railroad," is noted for its willow-ware.

Wellesley, 15 miles from Boston, on the "Boston and Albany Railroad," is the seat of Wellesley College, and has many elegant country residences.

Stockbridge, in Berkshire County, the home of the Indian tribe of that name, is a fine old town, with an Academy and Public Library. Here, and in the towns around, many noted literary men and women have country seats.

Barstables, on Cape Cod, is the capital of Barnstable County.

Dedham, the capital of Norfolk County, 10 miles south-west from Boston, on the "Boston and Providence Railroad," has a granite Court-house, Jail, etc.

Traer's Falls, in Franklin County, on the Connecticut, has a splendid waterfall, and one of the largest cutlery establishments in the world.

Other towns are: Southbridge, Spencer, Leominster, Framingham, Webster, Hampden, etc., etc. Find each on the map.

MAP DRAWING.

Draw nine vertical and six horizontal lines, as in the following figure, forming a rectangle composed of forty equal squares. Number the vertical lines from left to right, 1, 2, 3, etc., and letter the horizontal lines upwards, a, b, c, etc.

Point A, at the intersection of the lines 2 and a, is the exact north-west corner of the state.

Point B, at the intersection of the lines 6 and a, is 100 miles east of A, and 100 miles north of the Merrimack River.

Point C is on the line 7, half-way from the line e to the line f.

Point D is at the right-hand corner of the line 7, and below the line c, one-fourth the side of a square.

Point E is on the line 6, half-way between the lines b and c.

Point G is at the center of the square 6, 7.

Point H is a little to the left of the horizontal line c, one-eighth of the side of a square to the left of the vertical line 6.

Point I is on the horizontal line c, half-way between the lines 1 and 2.

10. Connect these points in order by dotted lines, and thus obtain the outline of the main portion of the state.

11. To locate the peninsula of Cape Cod, connect a point on the line 8, half-way between the lines c and d, with the intersection of the lines 9 and c; and connect this last point with the point F.

12. To locate Martha's Vineyard, extend the last line to the intersection of the lines 7 and a. To locate Nantucket, connect the intersection of the lines 9 and b with the intersection of the lines 8 and a.

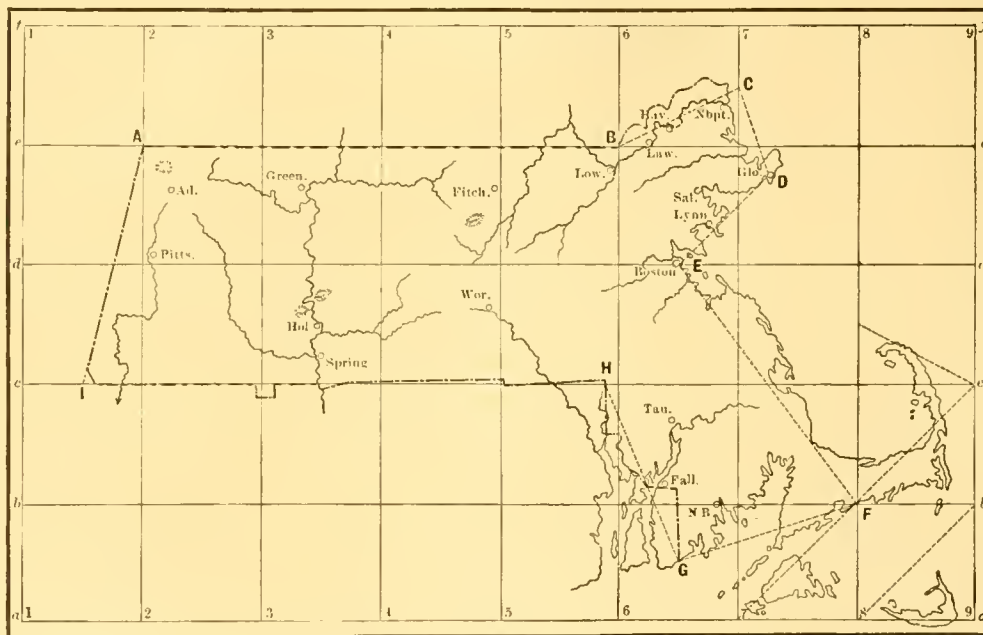
13. Draw the actual boundary lines so far as they vary from the dotted lines, and draw the outlines of the islands.

14. Draw the interior rivers and mountains of the state. Locate the principal cities, and letter the map.

15. The line AB is nearly on the parallel 42° 45' north latitude.

16. Point D is Gloucester; point E, Boston; point F, Hyannis; point G, the south-east corner of Rhode Island; and point H, the north-east corner.

17. The side of a small square in the figure represents a distance of about twenty-five miles.





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